Approved for usethrough 07/31/2006, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE er the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

#### 対TION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED WINTENTIONALLY UNDER 37 CFR 1.137(b)

Docket Number (Optional) 034299-000268

First named inventor: Bernard Aspar et al. Art Unit: 1773 Application No.: 09/600,590 Examiner: Kevin R. Kruer Filed: July 19, 2000 Title: Complaint Substrate In Particular For Deposit By Hetero-Epitaxy Attention: Office of Petitions Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 FAX: (571) 273-8300 If information or assistance is needed in completing this form, please contact NOTE: Petitions Information at (571) 272-3282. The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained. APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION NOTE: A grantable petition requires the following items: Petition fee: (1) Reply and/or issue fee; (2) Terminal disclaimer with disclaimer fee -- required for all utility and plant (3) applications filed before June 8, 1995; and for all design applications; and Statement that the entire delay was unintentional. (4) 1. Petition fee Small entity - fee \$\_\_\_\_\_ (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27. ☑ Other than small entity - fee \$1500.00 (37 CFR 1.17(m)) 2. Reply and/or fee A. The reply and/or fee to the above-noted Office action in the form of Amendment/ Response (identify type of reply):  $\bowtie$  has been filed previously on 1/16/07, a copy is enclosed. is enclosed herewith. B. The issue fee of \$ \_\_\_\_ has been paid previously on \_\_\_\_\_. is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is together (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO Time of the complete deposition form to the USPTO Time of the estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stops Petition, Commissioner for Patents, P.O. Box1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/64 (10-05)
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3.	Terminal disclaimer with disclaimer fee		
	Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.		
	A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ for a small entity or \$ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).		
4. STATEMENT. The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D))]. WARNING: Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR			
1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.			
up.	S.Blat	3/21/07	
	Signature	Date	
	Suvashis Bhattacharya	46,554 Registration Number, if applicable	
	Typed or printed name		
	P.O. Box 640640  Address	408-292-5800 Telephone Number	
	San Jose, CA 95164-0640 Address		
Enclosures: ⊠ Fee Payment			
⊠ Reply			
☐ Terminal Disclaimer Form			
☐ Additional sheets containing statements establishing unintentional delay			
◯ Other : Postcard			
	CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]  I hereby certify that this correspondence is being:		
	Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.		
	Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.		
Signature			
	Date Michelle R. Crosby		
L	Typed or printed name of person signing certificate		

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Docket No.: 034299-000268

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Adellicani:

Bernard Aspar et al.

**SERIAL NO.:** 

09/600,590

**CONFIRMATION NO.: 5219** 

FILING DATE:

July 19, 2000

TITLE:

Complaint Substrate In Particular For Deposit By Hetero-Epitaxy

**EXAMINER:** 

Kevin R. Kruer

TELEPHONE: (571) 272-1510

FAX: (703) 872-9306

ART UNIT:

1773

COPY

#### **CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop: AF, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450, on the date printed below:

Date:

Michelle R. Crosby

Mail Stop: AF

**Commissioner for Patents** 

P.O. Box 1450

Alexandria, VA 22313-1450

## **AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION**

Dear Sir:

This paper is responsive to the Final Office Action mailed July 13, 2006. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (Canceled)

- 13. (Previously presented) Compliant substrate according to claim 35, wherein said bonding interface is an interface resulting from a surface preparation and/or an interface resulting from a heat treatment and/or an interface resulting from a creation of defects.
- 14. (Previously presented) Compliant substrate according to claim 13, wherein said surface preparation is a control of roughness and/or hydrophylia.
- 15. (Previously presented) Compliant substrate according to Claim 35 where said structure also comprises at least one intermediate layer between the thin layer and the carrier.
- 16. (Previously presented) Compliant substrate according to claim 15, wherein the intermediate layer is a metal layer or metal alloy layer.
- 17. (Previously presented) Compliant substrate according to claim 15, wherein said at least one intermediate layer is formed such that it comprises non-homogeneities.

18-34. (Canceled)

35. (Currently Amended) Compliant substrate comprising a carrier and a structure comprising at least one thin layer, the structure being bonded on a surface of said carrier by molecular adhesion to constitute, the carrier and the structure being joined one to another by a bonding interface whose bonding energy is controlled to permit absorption, in whole or in part by the bonding interface, of stresses brought to said compliant substrate.

36-50. (Canceled)

- 51. (Previously Presented) Compliant substrate according to claim 35, wherein said stresses are brought by a hetero-epitaxial growth realized on the thin layer.
- 52. (Currently Amended) Compliant substrate according to claim 35, wherein the carrier comprises at least one intermediate layer formed or transferred on the surface of joined to said carrier, the bonding interface being located between said structure and said at least one intermediate layer formed or transferred on the surface of said carrier.
- 53. (Cancelled)
- 54. (New) Compliant substrate comprising: a carrier having a first thin layer; and

a structure comprising a second thin layer, the structure being bonded on the first thin layer of said carrier by molecular adhesion to form a bonding interface whose bonding energy is controlled to permit absorption, in whole or in part by the bonding interface, of stresses brought to said compliant substrate.

#### <u>REMARKS</u>

The Office Action mailed on July 13, 2006 has been carefully reviewed and considered.

Claims 13-17, 35 and 51-53 were previously pending, Claims 13-17, 35 and 51-53 stand rejected.

The Applicants have amended Claims 35 and 52. In addition, Claim 53 has been cancelled without prejudice or disclaimer of the subject matter contained therein. Applicants have also added new Claim 54. Applicants respectfully request the entry of the foregoing Amendments and reconsideration of the present application in light of the amendments and remarks.

#### The 35 U.S.C. § 112, First Paragraph Rejection

Claims 52 and 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. It is stated in the Office Action that Claims 52 and 53 contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Applicants respectfully traverse. However, to expedite prosecution of this application, the Applicants have amended Claim 52 and have cancelled Claim 53. Support for Claim 52 is found on Page 17, Lines 26-31 of the Applicants' specification.

#### The 35 U.S.C. § 102 Rejection

Claims 13-17, 35, and 51-53 are rejected under 35 U.S.C. 102(b) as being allegedly anticipated by Bisaro et al (US 5,141,894). The Applicants respectfully traverse.

Claim 35 has been amended to recite, among other things, that the structure is bonded on a surface of the carrier by molecular adhesion to constitute a bonding interface. This is not

taught in Bisaro. In addition, Bisaro does not hint, teach or suggest using molecular adhesion to bond the thin layer of the structure to the carrier. Accordingly, one skilled in the art would have no motivation to modify Bisaro or combine Bisaro with another reference to reach the subject matter recited in Claim 35. Considering that each and every element and limitation in Claim 35 must be taught in Bisaro to establish a 102 rejection, Claim 35 is distinguishable over Bisaro and is thus in a condition for allowance.

#### New Claim

The Applicants have added new Claim 54 to the present application. The Applicants believe that New claims are fully supported by the specification and no new matter has been added. Allowance of new Claim 54 is respectfully requested.

#### Conclusion

Based on all of the above, Applicants believe all claims now pending in the present application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

A three month extension fee is included with this response. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Applicants wish to thank the Examiner for carefully examining the present application and if a telephone conference would facilitate the prosecution of this application, the Examiner is invited to contact the undersigned at the number below.

Dated: 1 16 07

Respectfully submitted,

Suvashis Bhattacharya

Reg. No. 46,554

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